

What is claimed is:

1. A method for locating flaws on a three-dimensional object (2), particularly on its surface, the flaws being detected and located with an optical picture-taking device (3, 4),  
5 wherein  
the design data related to the object (2), the optical imaging properties of the picture-taking device (3, 4), and the position of the optical picture-taking device (3, 4) and the object (2) are known when the picture is taken, the location of the flaw on the object (2) being determined therefrom.
- 10 2. The method as recited in Claim 1,  
wherein  
the location of the flaw is determined in a coordinate system of the object (2), particularly in the coordinate system of the design data.
3. The method as recited in Claim 1 or 2,  
15 wherein  
the location of the flaw is transferred to a marking device (15), which marks the location of the flaw on the object (2).
4. The method as recited in Claim 3,  
wherein  
20 the marking device (15) is movable over the object (2) to the locations of the flaws using a displacement device (16).
5. The method as recited in Claim 4,  
wherein  
the start path for the marking device (15) is determined based on the design data  
25 related to the object (2), on position data and/or previously-defined, permissible areas of movement of the marking device (15).
6. The method as recited in one of the preceding Claims,  
wherein

the locations of flaws are displayed in a display, particularly in a print-out or on a screen.

7. The method as recited in one of the preceding Claims,

wherein

the optical picture-taking device (3, 4) is calibrated three-dimensionally, and wherein the

5 position of the object (2) is determined exactly by comparing design data and pictures that were taken.

8. The method as recited in one of the preceding Claims,

wherein

the optical picture-taking device (3, 4) calibrates the object (2) and/or one or all

10 displacement devices (9, 10, 16) three-dimensionally to each other.

9. A marking system for flaws on an object identified in an inspection, particularly for carrying out a method as recited in one of the Claims 1 through 8, with a marking head (17) and a displacement device (16),

wherein

15 the displacement device (16) positions the marking head (17) at the locations of the flaws based on design data related to the object (2) and transmitted position data related to the locations of flaws on the object (2).

10. The marking system as recited in Claim 9,

wherein

20 several marking heads (17) are provided, which are capable of being positioned and/or activated independently of each other.

11. The marking system as recited in Claim 10,

wherein

25 a large number of marking heads (17) is provided and is distributed over an area of the object that will possibly be marked, the displacement device (16) specifying the distance of a marking head (17) to be activated from the object (2).

12. The marking system as recited in Claim 10 or 11,

wherein

a marking control (18) for controlling the displacement devices (16) for the marking heads (17) automatically assigns a location of a flaw to a marking head (17) based on the design data.